



# Is frenuloplasty worthwhile? A 12-year experience

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## ABSTRACT

**INTRODUCTION** Frenuloplasty is commonly performed. Its outcome has never been reported.

**PATIENTS AND METHODS** We have performed 213 frenuloplasties since 1992. Patients were sent a questionnaire regarding indication, treatment advised on presentation, anaesthetic, outcome (linear analogue satisfaction score), and further intervention required.

**RESULTS** Overall, 48 of 209 (23%) patients replied (median age of series, 27 years; range 16–78 years: and of respondents, 27 years; range, 17–78 years). Indications included tearing/bleeding of the foreskin ( $n = 32$ ), balanitis ( $n = 3$ ), pain on intercourse ( $n = 26$ ), phimosis ( $n = 4$ ), ejaculatory ( $n = 1$ ) and hygiene ( $n = 1$ ) problems. Twenty-five patients received general anaesthesia. Median satisfaction score was 8 (range, 1–10). Thirty-four patients would recommend frenuloplasty to another with similar symptoms. Three of nine patients initially advised to undergo circumcision later underwent circumcision (frenuloplasty satisfaction score, 1–3), 1 awaits circumcision (score, 5), 1 has a tight foreskin (score, 3), and 4 are satisfied (scores 6,9,10,10). In total, 23 of 209 patients (11%; median age, 27 years) underwent circumcision following frenuloplasty. Median time to circumcision was 11 months (range, 5–52 months).

**CONCLUSIONS** This is the only reported series of frenuloplasty. The response rate reflects a young mobile population. Most men are satisfied with the outcome, including some initially advised to undergo circumcision. The overall rate of circumcision following frenuloplasty is likely to be 15–20%.

## KEYWORDS

Penile frenulum – Frenuloplasty

## CORRESPONDENCE TO

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Frenuloplasty is a commonly performed procedure in urological practice; however, its outcome has never been reported. We reviewed our 12-year experience of frenuloplasty to determine the success rate, complications, and risk of further intervention.

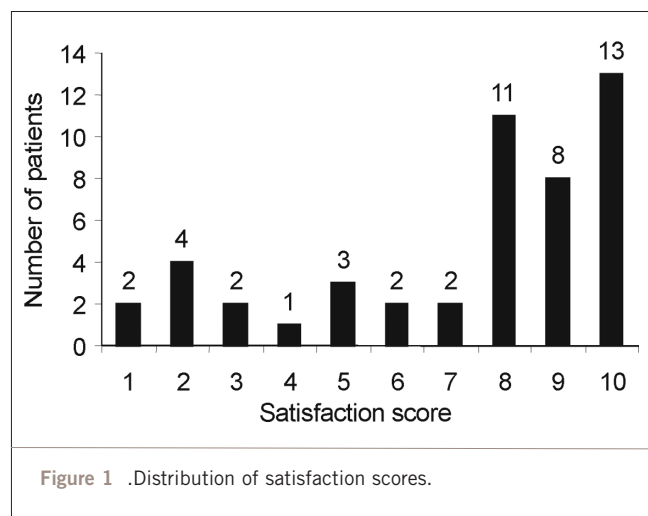
## Patients and Methods

The hospital surgical database was interrogated using the operating procedure code to identify patients who had undergone frenuloplasty. A total of 213 patients underwent frenuloplasty between March 1991 and December 2003. We also identified patients who underwent circumcision over the same time period and were, therefore, able to identify patients in whom circumcision followed a previous frenuloplasty in our unit. Patients were sent a postal questionnaire (Appendix 1) to identify presenting features, surgical options offered, anaesthetic type and outcome in

terms of a linear analogue satisfaction score and any further intervention required.

## Results

A total of 209 patients were sent questionnaires and we received 48 replies. Four patients were excluded from the study: two patients had frenuloplasty following circumcision, one patient was deceased, and one had learning difficulties. The median age of the total series was 27 years (range, 16–78 years) and median age of respondents was 27 years (range, 17–78 years). Indications for frenuloplasty included tearing/bleeding of the foreskin (32 patients), balanitis (3 patients), pain on intercourse (26 patients), phimosis (4 patients), ejaculatory problems (1 patient) and hygiene problems (1 patient). Twenty-five procedures were performed under general anaesthesia and the remainder under local anaesthesia. Two patients could not remember the type of anaesthetic.



Median satisfaction score was 8 (range, 1–10; Fig. 1). Three out of 9 patients, initially advised to undergo circumcision, later underwent circumcision (frenuloplasty satisfaction scores in these patients ranged from 1 to 3); one awaits circumcision (satisfaction score of 5); one has a tight foreskin (satisfaction score of 3); and four are satisfied (scores of 6, 9, 10 and 10, respectively). Thirty-four patients

would recommend frenuloplasty to a friend with similar symptoms (8 were not sure). In total, 23 patients (11%) underwent circumcision following frenuloplasty, with a median age of 27 years. Median time to circumcision was 11 months (range, 5–52 months). Where available, foreskin histopathology revealed normal foreskin (6 patients), balanitis xerotica obliterans (3 patients), inflammation (4 patients) and keratosis (1 patient).

## Discussion and Conclusions

To the best of our knowledge, this is the only reported outcome series of frenuloplasty in the literature. The response rate was disappointing (23%) but it reflects a young and mobile patient group. Our results suggest that frenuloplasty is a successful procedure. It is possible that frenuloplasty may avoid the need for circumcision even when a clinician felt circumcision to be indicated at presentation. The circumcision rate following frenuloplasty in our unit was 11%. Since some men on whom we had performed frenuloplasty may have undergone subsequent circumcision elsewhere, the true failure rate is likely to be a little higher than this. Further prospective studies are necessary to validate our findings.

## Appendix 1: 'Frenuloplasty' Questionnaire

Please circle the most appropriate answer to you. Please answer all questions. Thank you for your time.

Please affix patient label

Name \_\_\_\_\_

Hospital CRN \_\_\_\_\_

Date of birth \_\_\_\_\_

1. What symptoms led to your referral to the surgeon for this 'frenuloplasty' operation? (you can circle more than one answer)

- Tearing of the foreskin or bleeding
- Recurrent infections of the penis (balanitis)
- Pain on sexual intercourse
- Other (please specify)

2. Did the surgeon offer a 'circumcision' as an alternative operation for this condition?

- Yes
- No
- Can't remember

3. Was this 'frenuloplasty' operation performed under a local or general anaesthetic?

- Local
- General
- Can't remember

4. On a scale of 1 to 10 shown below, how satisfied are you with the results of your operation? (please select a figure from 1 to 10)

1\_\_\_\_2\_\_\_\_3\_\_\_\_4\_\_\_\_5\_\_\_\_6\_\_\_\_7\_\_\_\_8\_\_\_\_9\_\_\_\_10  
Very disappointed Very satisfied

5. Has it been necessary for you to have another operation for this condition and if so what procedure was performed?

None  
Repeat frenuloplasty Date \_\_\_\_\_  
Circumcision Date \_\_\_\_\_  
Other procedure (please specify)

6. With the experience you have of this operation, would you recommend a 'frenuloplasty' to a friend who suffers from the same problems that you had?

- Yes
- No
- Not sure

7. Please feel free to add any further comments that you may have: \_\_\_\_\_

Please return completed questionnaires using SAE to: Mr KJ Turner, c/o Mr McNeill's Secretary, Department of Urology, Western General Hospital, Crewe Road South, Edinburgh EH4 2XU.